

15/02/13 10 08 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence
		☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge
		☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other

1 28951

Tuesday, January 27, 2015 7:55:08 AM

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 1/26/15 **Start Qty:** 10.00 ***10***

Cust Item ID:

Required Date: 1/26/15 **Req'd Qty:** 10.00 ***10***

Customer:

Reference:

Run Start *NR1*

Approvals: _____ **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop ***NR2***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

**Insp.
Stamp**

Identify as per dwg & Stock Location:

0.00

130

10

FEB 18 2015

DAS
66

8-89

Packaging

Memo

0.00

Packaging

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.00

Quality Control

5/2/18 

15.2.18

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Picklist Print

Tuesday, January 27, 2015 7:55:07 AM

Page 1

Work Order ID: 128951

128951

Parent Item: D3622-1

D3622-1

Parent Item Name: Ball Stud

Start Date: 1/26/15

Required Date: 1/26/15

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP Rev:A New Issue 07-04-24 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M303H0.500		Purchased	No			100	f	13.5340	0.108	2			
------------	--	-----------	----	--	--	-----	---	---------	-------	---	--	--	--

M303H0 500

**

2L 15-2-11

303 HEX BAR .500

Location

Loc Qty

Loc Code

MAT018

13.534

m128496

1.004

m128882

12.53

1.1

DQA: _____ Date: _____



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DART AEROSPACE LTD		Work Order: 128951
Description: Ball Stud		Part Number: D3622-1
Inspection Dwg: D3622	Rev: C	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

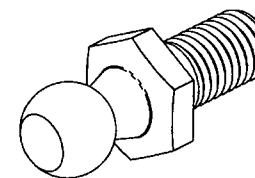
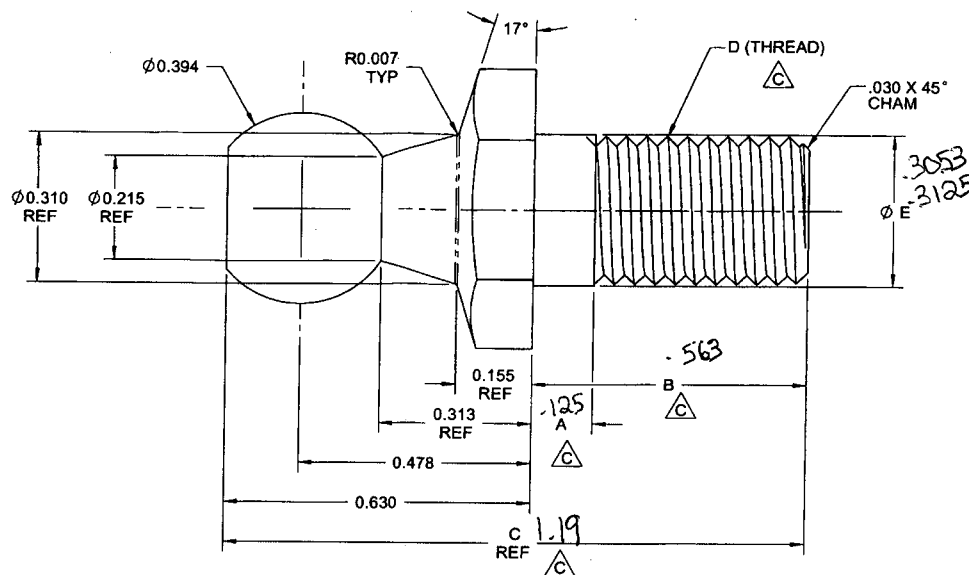
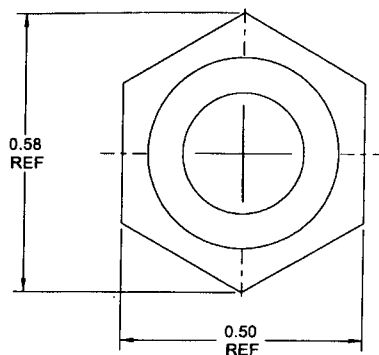
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.58	+/-0.030	572	/		VERU	SL-10
0.50	+/-0.030	498	/			
Ø0.394	+/-0.010	397	/			
Ø0.310	+/-0.010	312	/			
Ø0.215	+/-0.010	218	/			
0.155	+/-0.010	155	/			
0.313	+/-0.010	318	/			
0.478	+/-0.010	478	/			
0.630	+/-0.010	640	/			
0.125	+/-0.010	125	/			
0.563	+/-0.010	563	/			
1.19	+/-0.030	1200	/			
0.3125-24UNF-3A	+0.000/-0.072	308	/		mic	SL-4
M.O.W.	Min = 0.3336 Max = 0.3363	335	/			

Measured by: SL
Date: 15-2-11

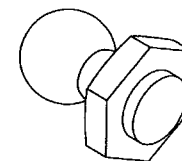
Audited by: B.E	DAS
Date: 15/02/13	08 9-89

Preliminary Approval:
Date:

Rev	Date	Change	Revised by	Approved
A	08.04.15	New Issue	KJ/DD	
B	10.02.02	Dwg Rev updated	KJ	
C	11.02.18	Dimensions updated per Dwg Rev C	KJ	



D3622-1 BALL STUD SHOWN



D3622-11 BALL STUD SHOWN

PART NUMBER	DIM A	DIM B	DIM C	WEIGHT (LBS)	THREAD D	Ø E
D3622-1	0.125	0.563	1.19	0.03	0.3125-24UNF-3A	0.3053 0.3125
D3622-3	0.125	0.563	1.19	0.03	0.1875-32UNF-3A	0.1840 0.1900
D3622-5	0.090	0.900	1.53	0.04	0.3125-24UNF-3A	0.3053 0.3125
D3622-7	0.060	0.330	0.96	0.03	0.3125-24UNF-3A	0.3053 0.3125
D3622-9	0.090	1.160	1.79	0.04	0.3125-24UNF-3A	0.3053 0.3125
D3622-11	0.060	N/A	0.69	0.02	NOT THREADED	0.270 0.300
D3622-13	0.090	0.680	1.31	0.03	0.3125-24UNF-3A	0.3053 0.3125

D3622-X BALL STUD

NOTES:

- 1) MATERIAL: AISI 303 HEX BAR
REF DART SPEC M303H0.500
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENT P/N D3622-X & B/N PER QSI 044
- 7) WEIGHT: SEE D3622-X TABLE

RELEASED
2010-09-23

128951-ML5
1501-29

C	SHEET 1: ADD -5, -7, -9, -11 & -13. ADD D3622-X TABLE. SHEET 2 DELETED	JPH	10.07.20
B	ADD -3 (SHEET 2)	HS	09.09.18
A	NEW ISSUE	MB	07.04.13
REV.	DESCRIPTION	BY	DATE
DESIGN	JPH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	JPH		
CHECKED	JPH	DRAWING NO.	REV. C
MFG. APPR.	JPH	D3622	SHEET 1 OF 1
APPROVED	JPH	TITLE	SCALE
DE APPR.	JPH	BALL STUD	NTS
DATE	10.07.20	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	